

Via Facsimile No. 703-872-9306

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REMARKS

The Office Action mailed April 15, 2004, and made final, has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-20 are now pending in this application. Claims 1-20 stand rejected. Claims 1, 7, 12, and 19 are amended.

The rejection of Claims 1-6, 12-16, and 18-20 under 35 U.S.C. § 103(a) as being unpatentable over Akamatsu (U.S. Patent No. 5,429,111) in view of Lee (U.S. Patent No. 5,241,463) is respectfully traversed.

Akamatsu describes an electronically controlled gas burning apparatus that includes a main cut-off valve (27), a gas conduit (26), and a flow control means (28) at each burner (1) that controls gas flow through a gas pipe (29) to the burner (1). The control means (28) includes a geared motor (70), a relay joint (73) that serves as a switch cam for converting the rotational motion of the geared motor (70) into a linear reciprocating motion via a serration shaft (72) of the geared motor (70), a bearing (74) having a spiral slit formed thereon, a shaft (76) making a linear reciprocating motion and having a pin (75) formed on the lower end thereof to be inserted in the bearing (74) (col. 12, line 66 – col. 13, line 6). Control means (28) further includes a valve including a valve body (80), a needle (82) constituting a valve for controlling flow rate, a valve (81) for introducing and discharging gas, and a needle receiver (84). The shaft (76) moves the valve (81) upward (col. 13, lines 47-48). From figures 4-7, it is apparent that the valve elements are moved vertically to operate the valve.

Lee describes a gas cooking appliance that includes an oven compartment and a range top (11) with four burners (12). A control panel (13) is provided at a front edge of the range top (11) and an indicator panel (14) is provided at the rear of the range top (11) and includes a master on/off switch (16) for shutting off electrical power to the burner control and gas flow to the top burners (12). Each of the burners (12) is controlled by a valve (32), with each valve (32) being

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driven by a reversible gear motor (31). A master solenoid valve (35) cuts off the gas supply when no burners (12) are in use, or in the event of faults, and upon a loss of operating power.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Akamatsu nor Lee, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicant respectfully submit that the valves in Akamatsu and Lee are not shown to be functionally equivalent. The valves in Akamatsu are described in detail and include features compatible with temperature and pressure monitoring as well as flow rate control through pressure sensors (col. 12, line 66 – col. 14, line 6). In contrast, the valves of Lee are described merely as having rotatable valve shafts.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. *In re Vaack*, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Applicants respectfully submit however, that a closer examination of the prior art would reveal that the prior art teaches away from the present invention, and further, the references conflict with each other. The present invention claims a control knob for a gas cooking element in combination with a motor driven gas lockout valve such that the control knob remains operable to control gas flow to the cooking element during a power loss and without a power backup. By contrast, Akamatsu teaches an appliance is only operational with a backup power

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supply during a power loss. Lee teaches an appliance that shuts down during a power loss. Neither Akamatsu nor Lee, considered alone or in combination, describe or suggest an appliance as claimed, and as such, the presently pending claims are patentably distinguishable from the cited combination.

Specifically, Claim 1 recites a gas cooking appliance including "at least one gas cooking element, said cooking element including a control knob operable to regulate a gas flow to said cooking element; and a gas lockout valve assembly in line with said at least one gas cooking element, said gas lockout valve assembly comprising a valve and a single digit rpm motor configured to rotate an actuation shaft in said valve to open or close the valve, wherein said control knob remains operable to regulate gas flow to said cooking element during a power loss and without power backup when said gas lockout valve is open during said power loss".

Neither Akamatsu nor Lee, considered alone or in combination, describe or suggest a gas cooking appliance that includes at least one gas cooking element, the cooking element including a control knob operable to regulate a gas flow to the cooking element, and a gas lockout valve assembly in line with the at least one gas cooking element, the gas lockout valve assembly comprising a valve and a motor configured to rotate an actuation shaft in the valve to open or close the valve, and wherein the control knob remains operable to regulate gas flow to the cooking element during a power loss and without power backup when the gas lockout valve is open during the power loss. Moreover, neither Akamatsu nor Lee, considered alone or in combination, describe or suggest a gas cooking element including a control knob and wherein the control knob remains operable to regulate gas flow to the cooking element during a power loss and without power backup when the gas lockout valve is open during the power loss. Rather, Akamatsu describes an appliance that requires a backup power supply in order to function during a power loss, and Lee describes an appliance that shuts down during a power loss.

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For the reasons set forth above, Claim 1 is submitted to be patentable over Akamatsu in view of Lee.

Claims 2-6 depend from independent Claim 1. When the recitations of Claims 2-6 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2-6 likewise are patentable over Akamatsu in view of Lee.

Claim 12 recites a gas range including "a cabinet; a plurality of gas heating elements coupled to said cabinet, each of said plurality of heating elements including a control knob operable to regulate a gas flow to said heating element; a gas manifold within said cabinet and configured to distribute gas to each of said heating elements; and a motorized gas lockout assembly coupled in line with said gas manifold, said motorized gas lockout assembly including a valve having an actuation shaft that is rotatably positionable to permit or deny gas flow to said gas manifold, and wherein each said control knob remains operable to regulate gas flow to a respective one of said heating elements during a power loss and without power backup when said gas lockout valve is positioned to permit gas flow during said power loss".

Neither Akamatsu nor Lee, considered alone or in combination, describe or suggest a gas range that includes a cabinet, a plurality of gas heating elements coupled to the cabinet, each of the plurality of heating elements including a control knob operable to regulate a gas flow to the heating element, a gas manifold within the cabinet and configured to distribute gas to each of the heating elements, and a motorized gas lockout assembly coupled in line with the gas manifold, the motorized gas lockout assembly including a valve having an actuation shaft that is rotatably positionable to permit or deny gas flow to the gas manifold, and wherein each control knob remains operable to regulate gas flow to a respective one of the heating elements during a power loss and without power backup when the gas lockout valve is positioned to permit gas flow during the power loss. Moreover, neither Akamatsu nor Lee, considered alone or in combination, describe or suggest a gas heating element including a control knob and wherein the control knob remains operable to regulate gas flow to the heating element during a power loss

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and without power backup when the gas lockout valve is positioned to permit gas flow during the power loss. Rather, Akamatsu describes an appliance that requires a backup power supply in order to function during a power loss, and Lee describes an appliance that shuts down during a power loss.

For the reasons set forth above, Claim 12 is submitted to be patentable over Akamatsu in view of Lee.

Claims 13-16 and 18 depend from independent Claim 12. When the recitations of Claims 13-16 and 18 are considered in combination with the recitations of Claim 12, Applicant submits that dependent Claims 13-16 and 18 likewise are patentable over Akamatsu in view of Lee.

Claim 19 recites a gas range including "a cabinet; a plurality of gas heating elements coupled to said cabinet; a gas manifold within said cabinet and configured to distribute gas to each of said heating elements; and a gas lockout assembly coupled in line with said gas manifold, said gas lockout assembly comprising: a valve; a motor coupled to and in driving relation to said valve, said motor rotating an actuation shaft in said valve to open and close a flow path through said valve to permit or prevent gas flow to said gas manifold, and wherein said valve remains open to permit gas flow to said gas manifold during a power loss and without power backup when said valve is open when said power loss occurs; and a cam coupled to said valve and indicating a position of said valve".

Neither Akamatsu nor Lee, considered alone or in combination, describe or suggest a gas range that includes a cabinet, a plurality of gas heating elements coupled to the cabinet, a gas manifold within the cabinet and configured to distribute gas to each of the heating elements, and a gas lockout assembly coupled in line with the gas manifold, and wherein the gas lockout assembly includes a valve, a motor coupled to and in driving relation to the valve, the motor rotating an actuation shaft in the valve to open and close a flow path through the valve to permit or prevent gas flow to the gas manifold, and wherein the valve remains open to permit gas flow to the gas manifold during a power loss and without power backup when the valve is open when

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the power loss occurs, and a cam coupled to the valve and indicating a position of the valve. Moreover, neither Akamatsu nor Lee, considered alone or in combination, describe or suggest a lockout valve that remains open to permit gas flow to a gas manifold during a power loss and without power backup when the valve is open when the power loss occurs. Rather, Akamatsu describes an appliance that requires a backup power supply in order to function during a power loss, and Lee describes an appliance that shuts down during a power loss.

For the reasons set forth above, Claim 19 is submitted to be patentable over Akamatsu in view of Lee.

Claim 20 depends from independent Claim 19. When the recitations of Claim 20 are considered in combination with the recitations of Claim 19, Applicant submits that dependent Claim 20 likewise is patentable over Akamatsu in view of Lee.

For at least the reasons set forth above, Applicant respectfully requests that the Section 103(a) rejection of Claims 1-6, 12-16, and 18-20 be withdrawn.

The rejection of Claims 7-11 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Akamatsu in view of Lee is respectfully traversed.

Claim 7 recites, a gas fired cooktop including "at least one gas burner; at least one control knob associated with said at least one burner; and a motorized gas lockout valve coupled to said at least one gas burner and establishing a gas supply connection thereto, said valve positionable between an open position whereby said control knob is effective to operate said burner and a gas lockout position, thereby rendering said control knob ineffective to operate said burner, and wherein said control knob remains effective to operate said burner during a power loss and without power backup when said gas lockout valve is in said open position during said power loss".

Neither Akamatsu nor Lee, considered alone or in combination, describe or suggest a gas fired cooktop that includes at least one gas burner, at least one control knob associated with the

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at least one burner, and a motorized gas lockout valve coupled to the at least one gas burner and establishing a gas supply connection thereto, the valve positionable between an open position whereby the control knob is effective to operate the burner and a gas lockout position, thereby rendering the control knob ineffective to operate the burner, and wherein the control knob remains effective to operate the burner during a power loss and without power backup when the gas lockout valve is in the open position during the power loss. Moreover, neither Akamatsu nor Lee, considered alone or in combination, describe or suggest a cooktop wherein a burner is associated with a control knob that remains effective to operate the burner during a power loss and without power backup when the gas lockout valve is in the open position during the power loss. Rather, Akamatsu describes an appliance that requires a backup power supply in order to function during a power loss, and Lee describes an appliance that shuts down during a power loss.

For the reasons set forth above, Claim 7 is submitted to be patentable over Akamatsu in view of Lee.

Claims 8-11 depend from independent Claim 7. When the recitations of Claims 8-11 are considered in combination with the recitations of Claim 7, Applicant submits that dependent Claims 8-11 likewise are patentable over Akamatsu in view of Lee.

Claim 17 depends from Claim 12 which is submitted to be patentable over Akamatsu in view of Lee as indicated above. When the recitations of Claim 17 are considered in combination with the recitations of Claim 12, Applicant submits that dependent Claim 17 likewise is patentable over Akamatsu in view of Lee.

For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 7-11 and 17 be withdrawn.

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In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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